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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/777,896	02/13/2004	Lixiang Wang	C3540.0001	6100
32172	7590	09/30/2005	EXAMINER	
DICKSTEIN SHAPIRO MORIN & OSHINSKY LLP 1177 AVENUE OF THE AMERICAS (6TH AVENUE) 41 ST FL. NEW YORK, NY 10036-2714			TRUONG, DUC	
			ART UNIT	PAPER NUMBER
			1711	

DATE MAILED: 09/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/777,896

Applicant(s)

WANG ET AL.

Examiner

Duc Truong

Art Unit

1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7 and 8 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 7 and 8 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>042904</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

In response to the Office action mailed August 18, 2005, Applicants had elected a single species of the combination of Ar1 of formula (2) and Ar2 of formula (30) for examination in that new claims 7-8 are readable on the elected species.

The search has been done, but no prior art has been found, and the search will be expanded to other species in the claims.

Claims 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chem Abstract 129: 331117 in view of 136: 247987.

129: 331117 discloses poly [1,4-phenylene vinylene (3-trimethylsilyl-1,4-phenylene) was synthesized to have photoconducting behavior and electroluminescence characteristic, comprising the steps of copolymerizing at least one Ar1 containing aromatic dialdehyde and at least one Ar2 containing aromatic diphosponium monomer (see page 30).

The disclosure of the reference differs from the instant claims in that it does not disclose the claimed Ar1. However, the reference does disclose the use of an aromatic component in an aromatic dialdehyde reactant.

136: 247987 discloses the claimed Ar1 containing aromatic dialdehyde in that Ar1 can be read on the claimed formula (13), (see pages 21-23), to react with an phosphonic acid ester containing compound.

It would have been obvious to one of ordinary skill in the art to use the Ar1 containing aromatic dialdehyde, as disclosed in 136: 247987, to replace the Ar1 containing aromatic dialdehyde, as disclosed in 129: 331117, in order to gain the

Art Unit: 1711

advantages of the combination of the references, that being a polyphenylene vinylene polymer which has the added properties of being light emitting polymer and electrochemical photoluminescence---.

129: 331117 discloses the reaction product of an Ar1 containing aromatic dialdehyde with an Ar2 containing aromatic diphosphonium monomer, but does not disclose the claimed specific Ar1 containing aromatic dialdehyde.

136: 247987 discloses the claimed Ar1 containing aromatic dialdehyde is well known in the art and can react with phosphonic acid ester containing compound.

The replacement of an aromatic dialdehyde of 129: 331117 by the use of that in 136: 247987 to react with an Ar2 containing aromatic diphosphonium monomer to form the products having the added properties would not provide an unexpected result to one of ordinary skill in the art.

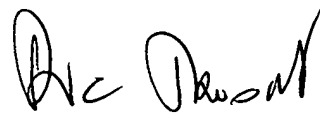
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duc Truong whose telephone number is 571-272-1081. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

Art Unit: 1711

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Ductruong', is positioned above the printed name.

DUCTRUONG
PRIMARY EXAMINER
